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10/647,560

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Scott M. Henneberry

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BRINKS HOFER GILSON & LIONE/PML
INDIANAPOLIS OFFICE
1 INDIANA SQ
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EXAMINER

TRAN, ELLEN C

ART UNIT

PAPER NUMBER

2134

MAIL DATE

DELIVERY MODE

06/25/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/647,560

Applicant(s)

HENNEBERRY ET AL.

Examiner

Ellen C. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date Jan '05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to: an original application filed on 25 August 2003, with acknowledgement of the benefit of provisional application 60/406,854 filed 29 August 2002, and provision applications 60/459,182, 60/459,152 filed 31 March 2003.
2. Claims 1-42 are pending; claims 1, 22, 30, 37, and 42, are independent claims.
3. The IDS submitted 9 January 2005 has been considered.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1-3, 8-10, 15-24, 27-32, 35-39, and 41-42**, are rejected under 35 U.S.C. 102(e) as being anticipated by Gristina et al. U.S. Patent No. 7,069,161 (hereinafter '161).

As to independent claim 1, “An intelligent electronic device for monitoring electrical parameters in an electrical circuit, the intelligent electronic device comprising: a sensor configured to be coupled with the electrical circuit and sense at least one of current and voltage in the electrical circuit, the sensor also configured to generate a signal indicative of the at least one of current and voltage” is taught in '161 col. 7, lines 44-67;

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“a processor coupled with the sensor, wherein the processor is configured to generate a measurement signal indicative of the at least one of current and voltage in response to the signal” is shown in ‘161 col. 8, lines 5-25;

“the processor configured to concurrently provide a first intelligent electronic device functionality comprising a first security access and a second intelligent electronic device functionality comprising a second security access; wherein the first security access and the second security access are each configured to provide user access to at least one mutually exclusive function” is disclosed in ‘161 col. 8, lines 26-32, note the tenants can access data relative to their own resource whereas the building owner can access all of the information.

As to dependent claim 2, “wherein the first intelligent electronic device functionality and the second intelligent electronic device functionality each exclusively comprise at least one of a circuit breaker control functionality, a power quality functionality, a billing power monitoring functionality, a protective relay functionality, and a sequence of events recording functionality” is taught in ‘161 col. 8, lines 45-67.

As to dependent claim 3, “wherein the first security access is enabled with a first user identification and the second security access is enabled with a second user identification” is shown in ‘161 col. 8, lines 26-32.

As to dependent claim 8, “further comprising an interface coupled with the processor, wherein the processor is configured to provide an energy parameter to the interface as a function of the measurement signal” is shown in ‘161 col. 8, lines 33-44.

As to dependent 9, “wherein the interface is configured to receive a first user identification to enable the first security access and a second user identification to enable the second security access” is taught in ‘161 col. 8, lines 26-33.

As to dependent claim 10, “wherein the first intelligent electronic device functionality and the second intelligent electronic device functionality are configured to share the interface” is shown in ‘161 col. 8, lines 26-33.

As to dependent claim 15, “wherein the processor comprises a first processor and a second processor, the first processor configured to provide the first intelligent electronic device functionality and the second processor configured to concurrently provide the second intelligent electronic device functionality” is disclosed in ‘161 col. 8, lines 33-44.

As to dependent claim 16, “wherein the second processor is configured to function independent of the first processor” is taught in ‘161 col. 8, lines 33-44.

As to dependent claim 17, “wherein the first intelligent electronic device functionality includes a billing power monitoring functionality” is shown in ‘161 col. 6, lines 1-17’

“and the second intelligent electronic device functionality includes a protective relay functionality” is disclosed in ‘161 col. 6, lines 51-67.

As to dependent claim 18, “wherein the first intelligent electronic device functionality includes a protective relay functionality” is taught in ‘161 col. 6, lines 51-67.

As to dependent claim 19, “wherein the first intelligent electronic device functionality includes a circuit breaker control functionality” is taught in ‘161 col. 8, lines 45-67.

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As to dependent claims 20 and 21, these claims are substantially similar to claim 17; therefore they are rejected along similar rationale.

As to independent claim 22, “A method of secure access to an intelligent electronic device, the method comprising: providing an intelligent electronic device configured to monitor electrical parameters of an electrical circuit in a power system” is taught in ‘161 col. 7, lines 44-67;

“prompting for entry of a user identification with the intelligent electronic device; allowing access to a first intelligent electronic device functionality provided by the intelligent electronic device only as a function of entry of a first user identification; and allowing access to a second intelligent electronic device functionality provided by the intelligent electronic device only as a function of entry of a second user identification, wherein the first intelligent electronic device functionality and the second intelligent electronic device functionality both include independent functions” is disclosed in ‘161 col. 8, lines 5-32.

As to dependent claim 23, “wherein the intelligent electronic device is operating the first and second intelligent electronic device functionalities in parallel” is disclosed in ‘161 col. 6, lines 51-67.

As to dependent claim 24, “further comprising performing a plurality of intelligent electronic device functionalities concurrently within the intelligent electronic device, wherein the intelligent electronic device functionalities include at least two of a circuit breaker control functionality, a power quality functionality, a billing power monitoring

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functionality, a protective relay functionality and a sequence of events recording functionality” is taught in ‘161 col. 8, lines 45-67.

As to dependent claim 27, “wherein allowing access comprises comparing the first user identification and the second user identification to a plurality of stored user identifications and enabling secure access to the respective first and second intelligent electronic device functionalities as a function of a match” is shown in ‘161 col. 8, lines 26-44.

As to dependent claim 28, “wherein prompting for entry of the user identification is in response to a request to access one of the first and second intelligent electronic device functionalities” is disclosed in ‘161 col. 8, lines 26-44.

As to dependent claim 29, “wherein prompting for entry of the user identification comprises communication of a plurality of stored user identifications over a communication medium to the processor, the processor configured to compare the stored user identifications to the first and second user identification” is taught in ‘161 col. 8, lines 26-44.

As to independent claim 30, this claim is directed to an intelligent electronic device configured to perform the method of claim 22; therefore it is rejected along similar rationale, note the action of storing in memory is taught in ‘161 col. 8, lines 5-44 a processor utilizing databases stores data.

As to dependent claim 31, “wherein the first and second security signals comprises a respective first and second user identification” is taught in ‘161 col. 8, lines 26-33.

As to dependent claim 32, “wherein the processor is configured to operate the first and second intelligent electronic device functionalities concurrently” is shown in ‘161 col. 6, lines 51-67.

As to dependent claim 35, “wherein at least one of the first and second security signals are transmitted over a communication medium” is taught in ‘161 col. 8, lines 26-33.

As to dependent claim 36, “further comprising a communication link coupled with the processor, wherein the processor is configured to request a plurality of stored security signals be communicated over the communication link to compare with the first and second security signals” is taught in ‘161 col. 8, lines 26-33.

As to independent claim 37, this claim is directed to an intelligent electronic device configured to monitor and store instructions performing the method of claim 22; therefore it is rejected along similar rationale.

As to dependent claim 38, “further comprising instructions in the memory device to enable access to one of the billing power monitoring functionality and the protective relay functionality with the same interface” is taught in ‘161 col. 6, lines 1-17 and col. 6, lines 51-67.

As to dependent claim 39, “further comprising instructions in the memory device to concurrently perform at least one of a circuit breaker control functionality, a power quality functionality and a sequence of events recording functionality” is taught in ‘161 col. 8, lines 45-67.

As to dependent claim 41, “further comprising instructions in the memory device to verify a determined condition has been met prior to providing access, wherein the

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determined condition comprises at least one of enablement of a safety lockout mechanism, transition of a digital input and a determined time period” is shown in ‘161 col. 8, lines 26-30.

As to independent claim 42, “A method of securing access to an intelligent electronic device via a graphical user interface that includes a display and a selection device, the method comprising: retrieving a security access entry for presentation on the display; displaying the security access entry on the display; receiving one of a plurality of security signals entered as a function of the selection device into the security access entry; in response to a first security signal, allowing access to a first intelligent electronic device functionality available within the intelligent electronic device” is disclosed in ‘161 col. 8, lines 1-25;

“and in response to a second security signal, allowing access to a second intelligent electronic device functionality available within the intelligent electronic device, wherein each of the first and second electronic device functionalities include a mutually exclusive function” is taught in ‘161 col. 8, lines 26-44.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 4-7, 25, 33 and 40**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gristina et al. U.S. Patent No. 7,069,161 (hereinafter '161) in view of Lightbody et al. U.S. Patent No. 6,000,034 (hereinafter '034).

As to dependent claim 4, the following is not explicitly taught in '161: **“wherein at least one of the first user identification and the second user identification includes a permissive signal, the permissive signal indicative of when a predetermined condition is met”** however '034 teaches a permissive signal is generated in response to input from an authorized user in col. 2, lines 43-67.

It would have been obvious to one of ordinary skill in the art at the time of the invention a system for managing resource consumption taught in '161 to include a means to send permissive signals. One of ordinary skill in the art would have been motivated to perform such a modification to provide a programmable microprocessor-based meters see '034 (col. 2, lines 30 et seq.) “Accordingly, it is an object of the present invention is to provide a programmable revenue-class electricity meter that provides a level of security against unauthorized access or tampering of revenue-related parameters, while leaving the rest of the functionality of the device configurable”.

As to dependent claim 5, **“wherein the predetermined condition comprises enablement of a safety lockout mechanism”** however '034 teaches safety lockout mechanism in col. 3, lines 1-19, note the key is the lockout mechanism.

As to dependent claim 6, **“wherein the predetermined condition comprises the status of a digital input to the intelligent electronic device”** however '034 shows the status of the

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input signal in col. 3, lines 1-19, note whether the key is in place determines the status of the input signal.

As to dependent claim 7, “wherein the predetermined condition comprises a determined time period” is shown in ‘161 col. 8, lines 33-44, note the details of the contract duties obviously can include a time period, i.e. time period for construction.

As to dependent claim 25, “wherein allowing access comprises receiving as one of the first user identification and the second user identification a security code and a permissive signal, wherein the permissive signal indicates that a predetermined condition has been met” however ‘034 teaches a permissive signal is generated in response to input from an authorized user in col. 2, lines 43-67.

As to dependent claim 33, “wherein one of the first and second security signals comprises a security code and a permissive signal” however ‘034 permissive signal in col. 2, lines 58-67.

As to dependent claim 40, “wherein the processor comprises a microprocessor and a digital signal processor in cooperative operation” however ‘034 teaches a DSP in col. 6, lines 5-41.

8. **Claims 11-14**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gristina et al. U.S. Patent No. 7,069,161 (hereinafter ‘161) in view of Lightbody et al. U.S. Patent No. 6,000,034 (hereinafter ‘034) in further view of Flyntz U.S. Patent No. 6,351,817 (hereinafter ‘817).

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As to dependent claim 11, the following is note explicitly taught in the combination of '161 and '034: "wherein the interface comprises a biometric identification device coupled with the processor, wherein the biometric identification device is configured to identify a user as part of at least one of the first security access and the second security access"

however

It would have been obvious to one of ordinary skill in the art at the time of the invention a system for managing resource consumption with permissive signals taught in the combination of '161 and '034 to include a means to send utilize biometrics of user authentication. One of ordinary skill in the art would have been motivated to perform such a modification to protect access to different security levels see '817 (col. 1, lines 14 et seq,) "Prior art, multilevel computer systems include the separation of the elements that store or process data at each security level through user controlled means such as a mechanical switch or by physical removal of secure storage components such as the hard drives. The security of such computer systems is dependent on the user and not the user's assigned access privileges. It also leaves the data created, stored, or accessed by one user accessible to another unauthorized user. In addition, a switching mechanism that does not disable the operation of the storage and processing components that are not at the security level selected creates the potential for data transfer between security levels through a covert transmission channel. Such channels can only be disabled through the removal of power from components at security levels that are not in use thereby disabling the channel at the source".

As to dependent claim 12, wherein the biometric identification device comprises a fingerprint scanner” however ‘817 teaches that biometric identification can be used to gain access in col. 5, lines 51-60.

As to dependent claim 13, wherein the biometric identification device comprises a face recognition unit” however ‘817 teaches that biometric identification can be used to gain access in col. 5, lines 51-60.

As to dependent claim 14, “wherein the biometric identification device comprises a retinal scanner” however ‘817 teaches that biometric identification can be used to gain access in col. 5, lines 51-60.

9. **Claims 26 and 34**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gristina et al. U.S. Patent No. 7,069,161 (hereinafter ‘161) in view of Flyntz U.S. Patent No. 6,351,817 (hereinafter ‘817).

As to dependent claim 26, the following is not explicitly taught in ‘161: **“wherein allowing access comprises receiving as one of the first and second user identification a security code from a biometric identification device”** however ‘817 teaches that biometric identification can be used to gain access in col. 5, lines 51-60.

It would have been obvious to one of ordinary skill in the art at the time of the invention a system for managing resource consumption taught in ‘161 to include a means to send utilize biometrics of user authentication. One of ordinary skill in the art would have been motivated to perform such a modification to protect access to different security levels see ‘817 (col. 1, lines 14 et seq.) “Prior art, multilevel computer systems include the separation of the elements that store

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or process data at each security level through user controlled means such as a mechanical switch or by physical removal of secure storage components such as the hard drives. The security of such computer systems is dependent on the user and not the user's assigned access privileges. It also leaves the data created, stored, or accessed by one user accessible to another unauthorized user. In addition, a switching mechanism that does not disable the operation of the storage and processing components that are not at the security level selected creates the potential for data transfer between security levels through a covert transmission channel. Such channels can only be disabled through the removal of power from components at security levels that are not in use thereby disabling the channel at the source".

As to dependent claim 34, "further comprising a biometric identification device, wherein at least part of the security code is generated by the biometric identification device" however '817 teaches that biometric identification can be used to gain access in col. 5, lines 51-60.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen C Tran whose telephone number is (571) 272-3842. The examiner can normally be reached from 6:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ellen Tran
Patent Examiner
Technology Center 2134
19 June 2007